

William Couper, Taxidermist-Entomologist

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Abstract: Records are made of what little is known about William Couper, a Canadian field naturalist of the latter half of the 19th century. This is based upon the literature and Couper's letters to Herman Strecker. Couper's collecting trips to Labrador and Anticosti Island are recounted. Considerable information is given about the controversy involving *Papilio brevicauda* Saunders and *Papilio anticostiensis* Strecker, and that involving *Lycaena pembina* Edwards and *Lycaena couperi* Grote.

Some years ago while carrying out the N.S.F. mission of cataloging and preserving the thousands of letters that Herman Strecker accumulated, we found a small bundle of them written in the early 1870's by William Couper of Montreal. Since none of the usual sources of biographical material about entomologists contains information about Couper I thought it worth-while to present to you something about the man gained from his letters. Couper is memorialized by *Glaucopsyche lygdamus couperi* Grote, originally described from Anticosti Island.

Couper's activity in the province of Quebec was outlined by Comeau (1965) in an address, "A Glance at the History of Entomology and Entomological Collections in Quebec" presented at "The Lyman Entomological Semicentennial Symposium." This was delivered on December 30, 1964, as part of the A.A.A.S. meetings held at Montreal. Comeau noted that Couper built the third entomological collection for the province. The first, that of Pierre Boucher, Governor of the city of Three Rivers, was made around 1664 and lost. Pierre Chasseur's collection was bought by the government of Lower Canada in 1827 and lost by fire in 1832. Couper's was given to Morin's College in the city of Quebec in 1871 and was destroyed by pests.

While living in Quebec Couper helped found the first entomological society in the province. This occurred in June 1862 in league with Provancher and Leclerc. It affiliated with the Entomological Society of Ontario in 1868 but died in 1871 when Couper left Quebec. In 1873 Couper was instrumental in organizing what became the Montreal branch of the Entomological Society of Quebec. Couper had a falling out with William Saunders, the editor of CANADIAN ENTOMOLOGIST. This caused him to bring together a group of entomologists, who had accidentally met on a mountain side, to form the Montreal Entomological Society.

With his letter of December 8, 1873, to Strecker, he included a clipping from a newspaper—name and date unknown to me—that opens as follows:

"ENTOMOLOGICAL SOCIETY.—The monthly meeting of this Society was held on Wednesday night at the residence of the President, Mr. William Couper, No. 67 Bonaventure Street. The following members were present—The President, Messrs Kolmar, Kuetzing, Caulfield, C. W. Pearson and G. B. Pearson. Mr. Alexander Gibbs was proposed for membership, and Mr. Andrew Johnson was elected a member . . ."

The "Commemorative Programme" for the 85th Annual Meeting of the Entomological Society of Ontario, 3–5 November 1948, celebrated the 75th anniversary year of the Montreal Branch of the society, the result of Couper's original Montreal Entomological Society. In the program there is "Short History of the Montreal Branch . . ." and on p. 15 a photograph and the signature of Couper are reproduced. On p. 6 of the program it states ". . . he left Montreal for New York in 1884. . . it is thought that he died at his son's residence at Troy in 1890."

Couper made an early collecting trip in 1867 to Labrador and a second in 1872. Also in that year, 1872, and upon two other occasions, he visited and collected insects upon the Island of Anticosti. I have only found references to an earlier trip (in 1865?) to Labrador but there appears to be first-hand information in the contemporary newspapers of Montreal to which I do not have access. His letters to Strecker at least give us an outline of his second trip (1872) and of his trips to Anticosti.

In the late 1860's and at least to March of 1871, Couper served as Assistant Curator and Taxidermist for "The Literary and Historical Society of Quebec." He apparently lived at 38 Bonaventure Street, Montreal. In 1873 he decided to set up as an independent taxidermist and established himself at 67 Bonaventure Street in Montreal. This was done after his second trip to Anticosti Island. On that trip he had some official position with the Anticosti Company, the only way he could reside upon the island. He sailed from Montreal on May 15th on a vessel chartered for the trip by the Anticosti Company. A letter dated August 6th, 1873 opens "I have just returned from Anticosti." Thus he spent about 9 or 10 weeks there on this trip. His subscribers, at \$12 a head, were Grote, W. H. Edwards, a Mr. Chase, and a Mr. Wassemann of England. Strecker, always parting with money only under duress, finally contributed his \$12 to Mrs. Couper after the vessel had sailed. Couper hoped to gain permanent employment with the Anticosti Company but this seems never to have materialized.

In addition to bringing to you something about one of the early Canadian collectors of Lepidoptera, these notes from Couper's letters touch upon two interesting taxonomic problems: the relationships of *Papilio brevicauda* Saunders and *anticostiensis* Strecker, and the identity of *Lycaena pembina* Edwards. I will let Couper tell you of his travels and collecting experiences by means of direct quotations from his letters.

"September 30, 1872"

"I have returned home after an absence of over four months. I left Quebec on May 18 last on board the government schooner "Stella Maris", for Anticosti. I remained on the island two weeks, when I took passage for the coast of Labrador, arriving at Natashiquan, and collected between latitude 50 and 51 successfully, obtaining a good number of diurnal lepidoptera. Everything went on well until I turned my face homeward by the western North Shore route, traversed by me about 7 years ago, terminating at a place called Mingan. At the latter place, I wished to obtain *Argynnis Boisduvalli* and *Colias interior*, 2 species occurring there about the 22 July. While thus engaged, and during my absence from camp (at Mingan), the whole of my former collection, the result of 5 weeks work on the lower portion of that coast, was destroyed by the mountain Indians. These miserable beings not only destroyed my collections, but robbed me of provisions, etc. I appealed to the priest then in charge of the Mission, who told me that he had no control in the matter of this nature, but that he would make inquiry, and help me all in his power. The only relief obtained from him was that he wished me to leave their territory or the jurisdiction of their chief as soon as possible, as he would not be responsible for their actions regarding my life or property. The tribe indicated their determination to punish me, in fact, to shoot me down. They looked on me as a government spy, and I am since informed that some English person told them who I was, and that I wrote in the Quebec papers about 7 years ago, that they speared salmon on the spawning grounds. This statement is true, for I did describe their disgraceful *modus operandi* in destroying salmon, but never anticipated that it would end so unfortunately for me. As I am now situated, I cannot, this year, fulfill my agreement with you. The species collected on Anticosti are, however, safe as they were not in camp at the time. The Anticosti collection is not large in species, but will be honestly divided between the 5 subscribers who advanced money for the object. These are Mr. Edwards of San Francisco, Mr. Mead of N. York, the Ent. Soc. of Ontario, Mr. Morrison of Boston and yourself. In order to carry out my contract with you, I propose going to Labrador (but not to Mingan) next season at my own expense, and if God spares me, you will be furnished with the missing species. I will send you the box containing the Anticosti species in a few days. I remain,

Yours truly,
/s/ William Couper"

"February 3, 1873
"Montreal

"Your favor of 7th ult. came duly to hand, and I have delayed answering for the reason that on its receipt I communicated with the Rev. Cannon [sic] Innes and Mr. W. Saunders of London, Ontario, asking for information regarding

Papilio brevicauda. Up to this instant, no answer from either. It appears to me that both wish to evade my queries, and I enclose Mr. S.'s last to me in order to show that he makes no illusion to it. Now, I wish to inform you that I know something regarding how Mr. S. obtained his specimen of the insect which he has named as above. The Rev. Mr. Innes, who has a cabinet of Lepidoptera, lived at Quebec during my residence there. After my return from my northern tour, about 6 years ago, I presented him with 2 or 3 specimens of a *Papilio* taken in Labrador, which I then supposed was *P. asterias*. He had, at the time, a few similar, but smaller, specimens of the same insect from Newfoundland. Mr. Innes removed afterwards to London, Ontario, where Mr. Saunders resides and, of course, the *Papilio* attracted the attention of the latter. I have not seen Mr. S.'s description, and I wish you to inform me what locality is given. Thanks for your information regarding the *Lycaena*, I am so pleased that it is *new*, and long to see it described and figured by you."

W. H. Edwards in volume 2 of his superb "Butterflies of North America" figured the imagoes of *brevicauda* on Plate *Papilio* VIII. The models for female figures definitely are from specimens taken in Newfoundland and supplied to Edwards by Saunders. The source of the male figure is in question. It may have been based upon an *Anticosti* specimen from Couper. It conforms in color of the band on the upper sides of the wings better with *Anticosti* males than with Newfoundland males. The mature larva figured on this plate is erroneously colored. Edwards corrected this with Plate *Papilio* VIIIB and noted the error in the text that accompanies that plate. The figures of the immature stages presented by Edwards as of *brevicauda* actually apply to *anticostiensis* Strecker. At the end of the text for Plate VIII B is a letter from T. L. Mead in which he compared the larvae and pupae of *brevicauda* with the figures on the plate. Males bred by Mead from Newfoundland larvae varied from some that were as free of fulvous suffusion as shown on Plate VIII, to some with a little fulvous suffusion. So the true source of the model for Edwards' figure of the male still is in doubt.

Edwards' Plate VIII was issued in December 1875. His notebooks for the period preceding this have been searched for information about *brevicauda*. He sent the pickled mature larva and egg shown on Plate VIII to Mrs. Peart on August 25, 1873. (ms Ent. Journal "1872" p. 235). In March of 1875 he paid Mrs. Peart for drawing the figures for Plate VIII (ms Ent. Journal "1872" p. 227). This notebook also contains quotations from Couper's letters to Edwards about *brevicauda*, but nowhere have I found any notation of the source of the male figured on Plate VIII.

The *Lycaena* mentioned in this letter of Couper later was named *couperi* by Grote. How Grote, not Strecker, came to name the taxon is explained in a letter that will be quoted further on.

The following are quotations from letter of April 15, 1873:

"*Pap. Anticostiensis* is what I may term an uncommon butterfly in every locality on the shores of the lower St. Lawrence visited by me. When I arrived at Fox Bay, Anticosti, last June, it was extremely rare, and I captured only 4 specimens in the course of 15 days. The specimens were apparently fresh on 20 June—they generally flew low, frequenting the flowers of a species of wild pea which occurs abundantly on the banks of the river on Anticosti and Labrador. I experienced great difficulty in approaching them with the net. On first appearance its flight is rapid and low extending along the margin of the rocky cliffs and grassy portions of the Bay, near tidemark. I never noticed them in the woods. They appeared to me to keep within the circuit of the Bay, and I remarked the same fact on the Labrador coast, where I also found them on the flowers of the wild pea. Indeed, they hovered about it so much that I expect to find its larva feeding on it this season. If I do, I will take descriptions of them, and then the difference between it and *Asterias* will be so far settled. I noticed toward the end of July, that their strength gives way and if the weather is cool, added specimens may be taken by hand from the flowers of the pea. It is the only species of *Papilio* so far noticed by me, either on Anticosti or Labrador."

"August 6, 1873

"Montreal

"I have just returned from Anticosti. The west end of the island so far visited by me, produced only 12 species of butterflies, viz. *P. anticostiensis* Strecker, which is found throughout the whole island; *P. Turnus* of which I took only 2, and I have not yet compared them with sp. taken here; an *Argynnis* not yet determined, and of which I have only 28 specimens. The only butterfly new to me is a *Colias* which was exceedingly rare at Ellis Bay, and I have taken notes on its habits. I have only 12 specimens of the latter, but you shall have a pair of the best. This *Colias* is evidently *different* from *Interior*. I fear that the last named does not occur south of the Labrador coast. The form which I have may be *Labradorensis*. I have also 9 specimens of *Hesperia paniscus* which was also rare. I took the same Lycaenidae which were met with last year: *M. Batesii*, *P. frigida*—the common nettle butterfly and a *Grapta*—the latter rare. However, I will do my best to distribute the material fairly. I am sorry that I have not met with a greater number of species, but that cannot be helped, perhaps I may have little better luck next time in a new locality. I will send such things as I believe will please you, and the rest of the material will be fairly distributed to my subscribers.

"I have discovered the food plant of *P. Anticostiensis* and have both eggs and larvae. The caterpillar feeds on two plants—viz.—*Archangelica antho-purpurea* or G. A. of Hoffmann, and *Heracleum lunatum* Michx. I have 4

notes regarding it. I have also discovered the food plant of *P. frigida*, and have eggs and larvae. The plant is the L. M.—*Larritis striata* Graham. I consider these investigations worth the time and trouble taken. I had a narrow escape from shipwreck on my way home.”

That is almost the entire letter. The rest of it goes into personalities.

I am recording a good deal of the next letter, of August 26, 1873.

“Ellis Bay is calculated to be 117 miles west from Fox Bay, as you can see on the map of Anticosti. I sent [send?] you a few extracts from my field book regarding the species remarked in your letter. *P. Anticostiensis* was noticed and a specimen taken at Ellis Bay on 14 June, the day of my arrival. From the latter date, as the weather became warmer, 40 specimens were taken up to 26 June. On 25 June I noticed a female depositing an egg on the food plant, *Archangelica anthopurpurea*, which occurs common throughout the section of the island. The egg, (one in bottle sent), is laid singly on the upper surface of the leaf, where it is exposed to the full force of the sun’s rays. The egg is spherical, pale yellow. On fine days, between 10 and 3 o’clock is the best time to capture them, but should the weather become cold or windy, not one would be seen. About half the specimens taken have short tails. I cannot say that the larvae sent to you is a full grown specimen. I took the largest which I could find only a day or two prior to leaving the Bay at the end of July. They are the only mature ones I could obtain, and have evidently the skin of the last moult. You can see that it differs from *Asterias* larva, by having oblique black lines on the sides of the body, besides other minute points. I have also sent you a young larva of about 10 days old, which shows the light yellow band in the center of the body. The regularity of the markings of the perfect insect (males and females) are to my observations of sufficient value to make a good species. The question remains what is the difference between it and *Brevicauda*. Saunders said that there is a vast difference, but time will settle that matter, and I will sift it next season. Every entomologist who has seen *P. Anticostiensis* since my return, believes that there is little or no connection between it and *Asterias*.

“I took 12 specimens of *Colias* at Ellis Bay—all in one locality— at different times. I extract the following from my notebook:—”

And then in columns he gives these dates each followed by “one specimen.” The dates are: June 3, 30, July 3, 5, 8, 14, 16, 19, 23, 24. “It is evidently a rare insect at Ellis Bay, another old resident informed me that it has never been common in that locality. Its flight differs from other species known to me. It is extremely restless, very zigzag and quick, and it goes over a great extent of ground in a short time; indeed, I had much difficulty to capture the few I obtained. It was only about 5 June that I noticed one light on a flower. It has a peculiarity when at rest, of lying half on its side, as if enjoying the heat

of the sun. I am sorry that the two examples sent you are both males, as it was not my intention to have done so; true, I did not think, as you have since informed me, they might be 2 species, and I have still doubts as to the likelihood of their being so. However, you will soon determine that when they are spread. It may be that the bright one is *Interior*. I have sent 2 to Edwards, 2 to Chase and 2 to Grote; the latter by the way called on me last week on his way to the Science Association at Portland. I do not think that the smaller one is *rubbed*—you better examine it closely.

Couper was a fairminded man. It irked Couper to read Strecker's intemperate remarks about other entomologists printed in his "Lepidoptera: Rhopaloceres—Heteroceres." The matter came to a head over Grote describing *Glaucopsyche couperi*. The first inkling of this trouble appears in the letter dated December 8, 1873, in which Couper wrote "Grote described the *Glaucopsyche* as I spoke to him about it when he visited Montreal this summer and I told him that you intended to name it *Couperi*. I did so because I deemed it necessary to present duplicate descriptions. I only wish that you will figure it in order to make the species *bona fide*." Strecker did figure the taxon (Lep. R.-H., pl. 10, f. 10, 11, 1874) but insisted that it was nothing more than *pembina* Edwards and that Grote was in error thinking it otherwise. This was said by Strecker in a vituperative manner. On March 28, 1874, Couper wrote Strecker "I note your decision that *Glaucopsyche couperi* Grote is identical with *Pembina* Edw. Still I cannot overlook the fact that you stated "It makes little difference who names a species, so long as it is well done." Of course, I am not prepared to say that Grote is wrong, as Mr. Edwards' description of *Pembina* is now before me and I cannot make it agree with the Ellis Bay *Lycaena*. There is also my knowledge of the species as a nondescript as far back as 1867, on my first visit to Labrador. You also informed me that Grote did what you intended to do. This was the cause of writing and quoting your statements and I trust you will excuse my being candid in saying that your answer to the above is comparatively vague. Moreover, Canadian entomologists of my acquaintance, who read your remarks on Mr. Grote, do not appreciate the style of epiplionema, considering in a scientific light, it would be well if they were omitted."

Strecker's reply to this was to terminate Couper's subscription to his book. Couper insisted upon reinstating the subscription a year later and there followed a few brief letters before the correspondence closed. This is an excerpt from a letter 17 April 1874, and what I quote is a quotation from a letter sent to Couper by W. H. Edwards.

"With regard to the *Lycaena* from Anticosti I presume Mr. Scudder is correct. The original *Pembina* came from Lake Winnipeg, a single specimen or a single pair, several years ago. These types were afterwards lost in a box of insects sent by me to California. I had forgotten them, and somehow another species

had been assumed to be *Pembina* by Scudder and others, and I had fallen into the error myself of thinking with them, that *Pembina* was allied to *Lygdamus*. I discovered the fact last year, and called Mr. Scudder's attention to it, while he was here on a visit. I think this *Couperi* was what had been thought to be *Pembina* and Grote was correct in naming of *Couperi*."

The problem of the identity of *pembina* Edwards is still unsettled. Currently, and for some time past, it has been accepted as a subspecies of *Plebejus icarioides* Boisduval. Dr. John Downey, who has been studying this complex species for many years has not been able to find any specimens anywhere in collections that hail from the reputed type locality. In the original description Edwards stated that the types were collected by Scudder at "Lake Winnipeg." Scudder himself stated that he took the specimens in a glade on the banks of the Saskatchewan River northwest of Lake Winnipeg. Dr. Downey has proven that the food plants of the larvae of the *icarioides* complex all are confined to the genus *Lupinus*. Dr. David Dunn, the ranking authority upon this genus for North America, tells me by letter that there are no known records of Lupines in the region published as the type locality of *pembina*. This blank area in the distribution of the genus *Lupinus* is a real one, not the result of insufficient collecting. All of this poses a problem, or three of them: first, is *pembina* an *icarioides* that has changed its food plant?; second, did Scudder really collect the types of *pembina* where he said he did or did Kennicott?; third, is *pembina* now applied to a taxon that is not the same species as that to which Edwards first applied the name?

Edwards' original description of *pembina* credited Kennicott with the capture of the type. This he had been told by Baird. However, research has given much greater support to John Pearsall being the captor and the locality being in western Montana, not "Lake Winnipeg." Apparently McDunnough had come to a similar conclusion about the type locality. (See Brown, 1970, pp. 397-402.) The name *pembina* Edwards now is used for *Icaricia icarioides* from Montana, Alberta and British Columbia in the foothills and mountains.

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